Arizona Education Data Management
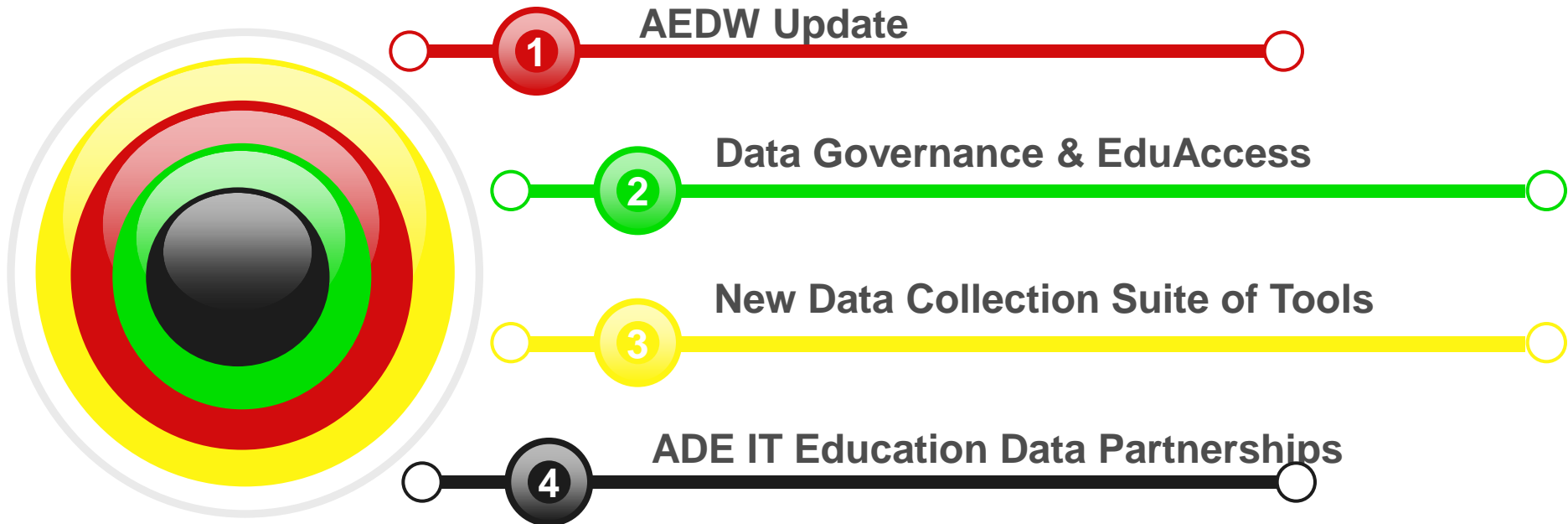# State Board of Education Update

Donald Houde, ADE CIO/CTO
June 28th, 2010

1. **AEDW Update**

2. **Data Governance & EduAccess**

3. **New Data Collection Suite of Tools**

4. **ADE IT Education Data Partnerships**

AEDW Data Management Update

- Year 3 of the original federal $6M has been completed.

- In the case of essential student data available in our operational student data collection systems, 51 measures were implemented that provide aggregations by multiple predefined dimensions. These measures enable LEAs and the SEA to identify students at behavioral and/or academic risk and to identify trends

AEDW Data Management Update

- The SharePoint-based user interface portal has been enhanced to include measures explanation, data dictionary, pre-constructed reports with filtering capabilities, Excel for full analysis, and all training materials.

- SEAs and county ESAs are already using the Arizona Education Data Warehouse, and are very pleased with both the measures and the new, advanced analytical capabilities.

- Over 200 users (figure #1) have been trained, and with training being offered to remaining districts and schools, charter schools, and thousands of teachers and other school professionals.

AEDW Data Management Update

- A new statewide data model, acknowledged at the most comprehensive available in the US, has been drafted to encompass all managed entities involved in the plethora of education programs and student services (figures 2&3).

- In addition a year + has been invested to mapping all of the funding trails for education federal based funds (both formulaic and grants) and rearchitecting Arizona's complex education master enterprise data profile (figures 4,5, & 6).

AEDW Data Management Update

- First steps and prototyping have been successful in using our Education Data Warehouse development methodology to centralize Arizona Education federal reporting compliance including EDEN/ED*Facts* reports and ARRA reporting.

- Our agency's Data Management Group has established the critical components of data governance strategy, and data exchange policies formulation is proceeding.

- Procedures have been built into the AEDW's measures design to evaluate system effect on student learning, thus enabling LEAs to identify students whose academic accomplishments are at risk.

AEDW Data Management Update

- All measures have a time dimension of fiscal year or ranges of fiscal years, to enable users in discovering trends and calculating rate of change from year-to-year or relative to a base year. Consequently, an LEA can identify critical student groups and individual students that the group comprises, and proceed to design and carry out remediation, and then to evaluate results via the AEDW measures in the years following.

- Once the teacher/student information is collected at the state level, teacher access has been integrated in the architecture and design.

AEDW Data Management Update

- **ADE 25 Groups Trained**
- **Researcher Groups: 8 groups**
  - **Pinal County ESA**
  - **P-20 Council**
  - **Northern Arizona University**
  - **Maricopa County ESA**
  - **Coolidge ESA**
  - **Charter School Association**
  - **Boston Consulting**
  - **ASU**
- **Auditor General's Office**
- **50 Large Group Demonstrations**

- **18 Trained LEAs**
  - **Avondale Elementary**
  - **Deer Valley Unified**
  - **Glendale Unified**
  - **Flagstaff unified**
  - **Imagine Schools**
  - **Lake Havasu**
  - **Mesa Unified**
  - **Murphy Elementary**
  - **Nogales Unified**
  - **Safford Unified**
  - **Sunnyside Unified**
  - **Tolleson Elementary**
  - **Tolleson Union**
  - **Tucson Unified**
  - **Union Elementary**
  - **West-Mec**
  - **Wilson Elementary**
  - **Yuma/Carpe Diem**

AEDW Data Management Update

- Integral to our data governance and continuity of operations (COOP), we have defined online, near line, and offline strategies for data archiving, and have expanded our SAN storage infrastructure to enable their implementation

- LEAP – the new teacher data collection and management suite

AEDW Data Management Update

- We have developed, with the assistance of a highly competitive award from Microsoft, EDUACCESS, a new Enterprise Class Statewide Identity Management System that establishes secure access to all ADE operational systems, IDEAL, and the Arizona Education Data Warehouse; migration of teacher authentication has been completed.

- EDUACCESS, with assigned EduIDs have been developed and deployed to request, grant, and maintain access to AEDW.

- Access administration is covered by ADE's data governance policies and procedures, and overseen by the agency's Data Management group, and all users must sign policy agreement forms.

- Every LEA user is associated with specific entities whose student level data they are allowed to view, and researchers are restricted to a separate data cube where students identities are scrambled. (figures 12,13)
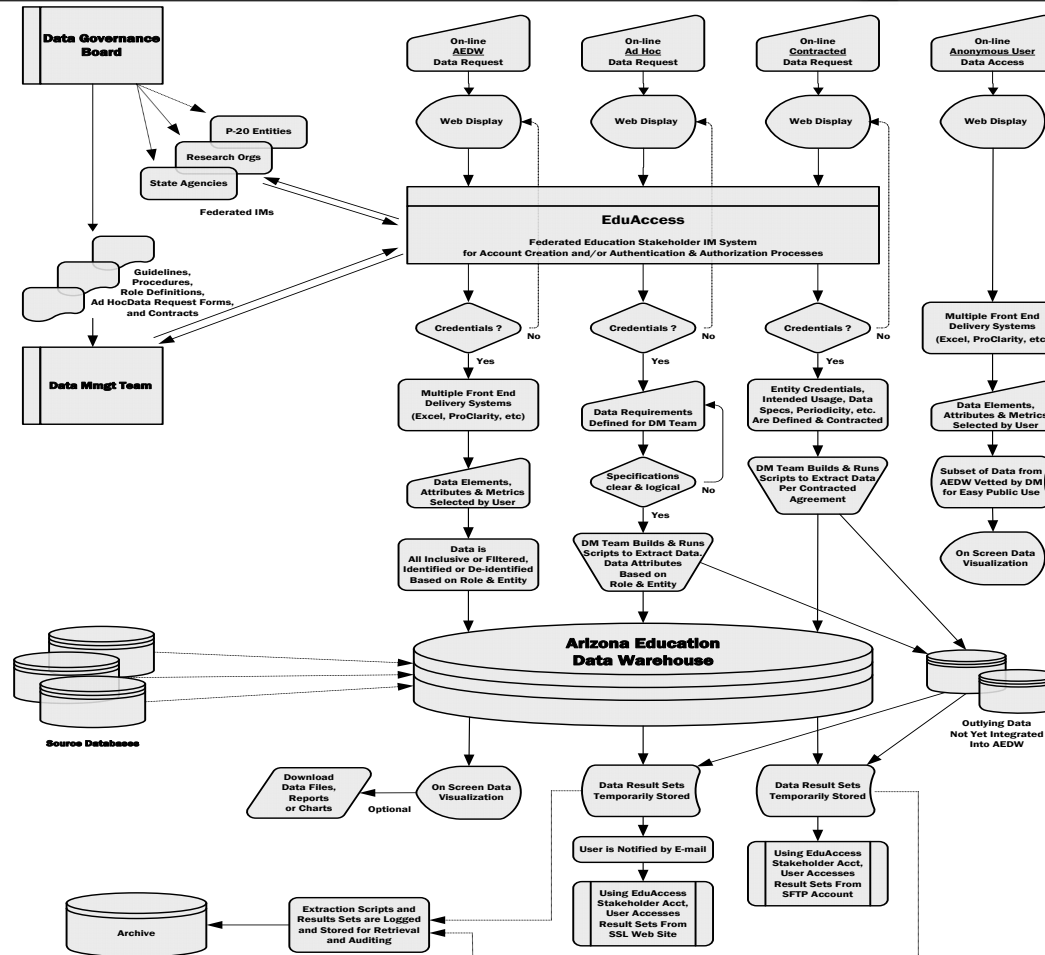
Arizona's New Data Collection Suite

As a result of the work completed on AEDW and ARRA 4 Assurance compliance requirements ADE is required to enhance Arizona's statewide data collection efforts to include (figures 7-11):

1. Teacher/Course/Class/Student Connections
2. Class completion codes
3. Post Secondary Readiness Test Scores
4. AZ Graduating Students requiring Remediation in Post Secondary
5. AZ Graduating Students who are successful in Post Secondary

Data Governance Business Processes
(Figure 12)

Arizona's New Data Collection Suite

New Data Collection DEMO

- Will be piloted in July, 2010 with two school districts (Osborn and Gadsden).

- Will be expanded to include 13 other districts by October 1st, 2010

- Will be rolled out to entire state by June 1st, 2011

ADE IT Data Partnerships

- ABOR
- ASU TPrep
- Morrison Institute
- Arizona Community Foundation
- Charter School Assn.
- Maricopa County ESA
- DES
- AZCommerce
- Colorado Dept of Ed.
- Secure Care Facilities
- Bureau of Indian Education

- School Districts
- CCSSO
- USDOE
- Rodel Foundation
- Data Quality Campaign
- Other SEAs
  - Wisconsin
  - Nevada
  - Kansas
  - Utah
  - North Carolina
  - Florida
- More…

Thank You!

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